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KNOBBE MARTENS OLSON & BEAR LLP
2040 MAIN STREET
FOURTEENTH FLOOR
IRVINE, CA 92614

EXAMINER

JONES, HEATHER RAE

ART UNIT	PAPER NUMBER
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2481

NOTIFICATION DATE	DELIVERY MODE
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ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

jcartee@kmob.com
efiling@kmob.com
eOAPilot@kmob.com

Office Action Summary	Application No. 10/603,357	Applicant(s) BRAUN ET AL.	
	Examiner HEATHER JONES	Art Unit 2481	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 July 2011.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on ____; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 5) ☒ Claim(s) 21-53 is/are pending in the application.
- 5a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 6) ☐ Claim(s) ____ is/are allowed.
- 7) ☒ Claim(s) 21-53 is/are rejected.
- 8) ☐ Claim(s) ____ is/are objected to.
- 9) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☒ The drawing(s) filed on 25 June 2003 and 07 April 2009 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

- 12) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 26, 2011 has been entered.

Response to Arguments

2. Applicant's arguments with respect to claims 21-53 have been considered but are moot in view of the new ground(s) of rejection.

35 USC § 101

3. The method claims 21-42 are considered to be statutory because they are tied to an apparatus. The computer-readable medium claims 44-48 are considered to be statutory because they are directed to only non-transitory computer-readable mediums. The apparatus claims 49-53 are considered to be statutory because they can not be implemented solely using software.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 21-23, 27, 28, 32-35, 38-41, 43-45, 47-50, 52, and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chambers et al. (U.S. Patent Application Publication 2003/0236581) in view of Suzuki et al. (U.S. Patent 6,245,982) in view of Zhang (U.S. Patent Application Publication 2004/0064209) in view of Zimmerman (U.S. Patent 6,411,289).

Regarding claim **21**, Chambers et al. discloses a method of providing synchronization of a video presentation with an audio presentation, comprising: providing for display on a user system an interactive user interface (Figs. 3-5), the interactive user interface including: an audio waveform corresponding to the digital samples of audio over time (Fig. 3); time information displayed in association with the recorded audio waveform (time information can be seen on the x-axis of the audio waveform diagram in the window (104) in Fig. 3). However, Chambers et al. fails to disclose receiving over a data network digital samples of recorded audio; wherein the audio waveform is displayed in conjunction with a time axis, including textual displays of time values at a plurality of points along the time axis; a cue insertion interface that enables a user to insert a cue at one or more locations with respect to the audio waveform, wherein the cue is configured to cause a modification with respect to the abstract visual presentation in synchronization with the

audio presentation when the audio presentation is audibly played back, with the abstract visual presentation, via a playback device associated with a viewer of the abstract visual presentation, wherein the viewer playback device is separate from the editing system; receiving a first signal from a user input device to designate a cue at a first location with respect to the audio waveform; and storing the designated cue in computer readable memory.

Referring to the Suzuki et al. reference, Suzuki et al. discloses a method of providing synchronization of a video presentation with an audio presentation, comprising: a method of providing synchronization of a video presentation with an audio presentation (Figs. 6, 8, and 9), comprising: receiving over a data network digital samples of recorded audio (Fig. 1; col. 7, lines 19-24 and 48-67 – data being received over a network); a cue insertion interface that enables a user to insert cue at one or more locations with respect to the audio waveform (Fig. 6 – two types of cues can be seen being used to designate information, the arrows and the bars; col. 12, line 30 – col. 13, line 3 - the operator can edit the cues; col. 13, line 28 - col. 15, line 38 - motion and scene components (cues) can be edited according to the user's liking), wherein the cue is configured to cause a modification with respect to the abstract visual presentation in synchronization with the audio presentation when played back (col. 18, lines 14-26 - the motion waveform is changed according to the motion components); receiving a first signal from a user input device to designate

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a cue at a first location with respect to the audio waveform (Fig. 6 – two types of cues can be seen being used to designate information, the arrows and the bars; col. 12, line 30 – col. 13, line 3 - the operator can edit the cues; col. 13, line 28 - col. 15, line 38 - motion and scene components (cues) can be edited according to the user's liking); and storing the designated cue in computer readable memory (col. 14, lines 8-13).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have allowed the user to edit and insert cues along the audio waveform as disclosed by Suzuki et al. in the method disclosed by Chambers et al. in order to modify the visual presentation of the audio during playback to further engage the user. However, Chambers et al. in view of Suzuki et al. still fail to disclose wherein the audio waveform is displayed in conjunction with a time axis, including textual displays of time values at a plurality of points along the time axis; and that the cue is configured to cause a modification with respect to the abstract visual presentation in synchronization with the audio presentation when the audio presentation is audibly played back, with the abstract visual presentation, via a playback device associated with a viewer of the abstract visual presentation, wherein the viewer playback device is separate from the editing system.

Referring to the Zhang reference, Zhang discloses a method of providing synchronization of a video presentation with an audio presentation that comprises: receiving over a data network digital samples

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of recorded audio (paragraph [0024] – receiving data over a network); and wherein the audio waveform is displayed in conjunction with a time axis, including textual displays of time values at a plurality of points along the time axis (Figs. 3-6; paragraph [0029] - the horizontal axis denotes time; paragraph [0034] - the x-axis showing the signal across time).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the audio waveform displayed in conjunction with a time axis, including textual displays of time values at a plurality of points along the time axis as disclosed by Zhang in the method disclosed by Chambers et al. in view of Suzuki et al. in order to allow the user to easily detect particular segments of the audio based on time. However, Chambers et al. in view of Suzuki et al. in view of Zhang still fail to disclose that the cue is configured to cause a modification with respect to the abstract visual presentation in synchronization with the audio presentation when the audio presentation is audibly played back, with the abstract visual presentation, via a playback device associated with a viewer of the abstract visual presentation, wherein the viewer playback device is separate from the editing system.

Referring to the Zimmerman reference, Zimmerman discloses a method of providing synchronization of a video presentation with an audio presentation, wherein the cue (the cue is the scaled numeric table which is created in Fig. 3) is configured to cause a modification with respect to the

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abstract visual presentation in synchronization with the audio presentation when the audio presentation is audibly played back, with the abstract visual presentation (Fig 2 is the abstract visual presentation of the audio presentation; col. 4, lines 2-4; col. 2, lines 43-52), via a playback device associated with a viewer of the abstract visual presentation, wherein the viewer playback device is separate from the editing system (Fig. 1 depicts the apparatus the abstract visual presentation is reproduced on; col. 4, lines 7-14 – the memory stores all of the cue information (tables) which can be created elsewhere and stored on a portable storage medium).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have had a separate device for the visual presentation where the cues are used to modify the visual presentation as disclosed by Zimmerman in the method disclosed by Chambers et al. in view of Suzuki et al. in view of Zhang in order to provide any user with a graphical presentation of the audio data.

Regarding claim **22**, Chambers et al. in view of Suzuki et al. in view of Zhang in view of Zimmerman discloses all the limitations as previously discussed with respect to claim 21 including that the method further comprising providing for display via the interactive user interface at least left and right audio channel waveforms (Chambers et al.: Figs. 3-5 – reference characters (106) and (108) along with (104) display the left and right channels; paragraph [0097]).

Regarding claim **23**, Chambers et al. in view of Suzuki et al. in view of Zhang in view of Zimmerman discloses all the limitations as previously discussed with respect to claim 21, but fails to explicitly disclose that the first signal indicates the beginning of a guitar rift. However, Suzuki et al. discloses in Fig. 9 capturing the waveform of the guitarist (col. 14, lines 25-36). Suzuki et al. also discloses a cue insertion interface that enables a user to insert cue at one or more locations with respect to the audio waveform (Fig. 6 – two types of cues can be seen being used to designate information, the arrows and the bars; col. 12, line 30 – col. 13, line 3 - the operator can edit the cues; col. 13, line 28 - col. 15, line 38 - motion and scene components (cues) can be edited according to the user's liking). Furthermore, Zimmerman discloses in Fig. 4D a list of instruments that can be represented in the visual presentation (col. 9, lines 9-26). Therefore, the user would be able to insert a cue to mark the guitar if one desired.

Regarding claim **27**, Chambers et al. in view of Suzuki et al. in view of Zhang in view of Zimmerman discloses all the limitations as previously discussed with respect to claim 21 including that the method further comprising inserting at least one cue with respect to the audio based at least in part on a singer's singing (Suzuki et al.: Fig. 9 - section (81) – the singers are monitored - Chorus (P4); Fig. 6 – two types of cues can be seen being used to designate information, the arrows and the bars; col. 12, line 30 – col. 13, line 3 - the operator can edit the cues; col. 13, line 28

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- col. 15, line 38 - motion and scene components (cues) can be edited according to the user's liking).

Regarding claim **28**, Chambers et al. in view of Suzuki et al. in view of Zhang in view of Zimmerman discloses all the limitations as previously discussed with respect to claim 21 including that the method further comprising inserting at least one cue with respect to the audio based at least in part on information from a microphone and/or based at least in part on information from a vibration sensor located on or near an instrument (Suzuki et al.: Figs. 4A-4C, 7A-7E, and 8; col. 8, line 57 – col. 9, line 61).

Regarding claim **32**, Chambers et al. in view of Suzuki et al. in view of Zhang in view of Zimmerman discloses all the limitations as previously discussed with respect to claim 21 including that the method further comprising using mixing board automation to generate at least one cue (Chambers et al.: paragraph [0005]).

Regarding claim **33**, Chambers et al. in view of Suzuki et al. in view of Zhang in view of Zimmerman discloses all the limitations as previously discussed with respect to claim 21 including that the method further comprising using a track pan value to generate a cue (Chambers et al.: the track pan value can be determined from looking at the distribution of the left and right channels as seen in Figs. 3-5).

Regarding claim **34**, Chambers et al. in view of Suzuki et al. in view of Zhang in view of Zimmerman discloses all the limitations as previously

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discussed with respect to claim 21 including that the method further comprising using track fader adjustments, bus volume, and/or effects send and return levels to generate one or more cues (Suzuki et al.: col. 18, lines 14-26 - volume).

Regarding claim **35**, Chambers et al. in view of Suzuki et al. in view of Zhang in view of Zimmerman discloses all the limitations as previously discussed with respect to claim 21, including using an output from a reverb device and/or compressor device to generate one or more cues (Suzuki et al.: col. 14, lines 25-36 – motion waveform for a guitar; when hooking up the components on the guitar to acquire the motion waveforms one could attach a sensor on to the reverb unit).

Regarding claim **38**, Chambers et al. in view of Suzuki et al. in view of Zhang in view of Zimmerman discloses all the limitations as previously discussed with respect to claim 21 including that the cue is a mood cue (Suzuki et al.: col. 15, lines 17-30 – effects-applying processes - all of these effect applying processes will create a certain mood for the viewer when the viewer plays back the presentation).

Regarding claim **39**, Chambers et al. in view of Suzuki et al. in view of Zhang in view of Zimmerman discloses all the limitations as previously discussed with respect to claim 21 including that the designated cue indicates the location of a beat in the audio waveform (Suzuki et al.: col. 17, lines 50-67 – beats are part of the tempo of the music).

Regarding claim **40**, Chambers et al. in view of Suzuki et al. in view of Zhang in view of Zimmerman discloses all the limitations as previously discussed with respect to claim 21 including that the cue includes a cue identifier indicating a cue type and data indicating a visualization engine that the cue identifier follows (Suzuki et al.: Fig. 6 – two types of cues can be seen being used to designate information, the arrows and the bars; col. 12, line 30 – col. 13, line 3 - the operator can edit the cues; col. 13, line 28 - col. 15, line 38 - motion and scene components (cues) can be edited according to the user's liking).

Regarding claim **41**, Chambers et al. in view of Suzuki et al. in view of Zhang in view of Zimmerman discloses all the limitations as previously discussed with respect to claim 21 including that the designated cue is included in a file separate from the audio presentation (Suzuki et al.: col. 17, lines 39-49 – each motion component is stored in the motion database, which is separate from the music file). However, Chambers et al. in view of Suzuki et al. in view of Zhang in view of Zimmerman fails to disclose that the method further comprises accessing the file over a network separately from the audio. Official Notice is taken that the concept and advantages of accessing files over a network is well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have accessed the file containing the cues over a network in the method disclosed by Chambers et al. in view of Suzuki et al. in view of Zhang in view of Zimmerman in

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order to allow the method to be more versatile and user friendly by allowing the user to have access to more files that can be found over a network.

Regarding claim **43**, Chambers et al. in view of Suzuki et al. in view of Zhang in view of Zimmerman discloses all the limitations as previously discussed with respect to claim 21 including that the method further comprises: accessing the designated cue from memory; accessing the digital audio samples from memory; providing the audio presentation for display in association with the visual presentation using the designated cue (Suzuki et al.: Fig. 6 – two types of cues can be seen being used to designate information, the arrows and the bars; col. 12, line 30 – col. 13, line 3 - the operator can edit the cues; col. 13, line 28 - col. 15, line 38 - motion and scene components (cues) can be edited according to the user's liking; col. 17, lines 39-49 – playback; col. 18, lines 14-26 - the motion waveform is changed according to the motion components).,

Regarding claims **44, 45, 47, and 48**, these are medium claims corresponding to the method claims 21, 22, 40, and 41 respectively. Therefore, claims 44, 45, 47, and 48 are analyzed and rejected as previously discussed with respect to claims 21, 22, 40, and 41.

Furthermore, the medium disclosed in claims 44, 45, 47, and 48 stores the instructions to perform the method as disclosed in claims 21, 22, 40, and 41 (Chambers et al.: paragraph [0011]; Suzuki: col. 19, lines 17-23 and 30-37).

Regarding claims **49, 50, 52, and 53**, these are apparatus claims corresponding to the method claims 21, 22, 40, and 41 respectively.

Therefore, claims 49, 50, 52, and 53 are analyzed and rejected as previously discussed with respect to claims 21, 22, 40, and 41.

Furthermore, the apparatus disclosed in claims 49, 50, 52, and 53 perform the method as disclosed in claims 21, 22, 40, and 41 (Chambers et al.: the apparatus can be seen in Fig. 1; Suzuki: the apparatus can be seen in Fig. 1).

6. Claims 24-26, 46, and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chambers et al. in view of Suzuki et al. in view of Zhang in view of Zimmerman as applied to claims 24, 44, and 49 above, and further in view of Kerr (U.S. Patent 7,113,196) in view of Tyra (U.S. Patent Application Publication 2004/0032489).

Regarding claim **24**, Chambers et al. in view of Suzuki et al. in view of Zhang in view of Zimmerman discloses all the limitations as previously discussed with respect to claim 21 including that the method further comprising automatically inserting at least one cue with respect to the audio based at least in part on a signal received from an automated lighting system used to light a live performance (Suzuki et al.: Fig. 9 – section 81; col. 2, lines 35-43; col. 14, lines 37-53). However, Chambers et al. in view of Suzuki et al. in view of Zhang in view of Zimmerman fails to disclose that the information regarding the light source is actually coming from the light source and not being entered in by the user and that

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the signal received from the automated lighting system is used to modify the abstract visual presentation when the audio presentation is later audibly played back via the playback device.

Referring to the Kerr reference, Kerr discloses a method of providing synchronization of a video presentation with an audio presentation, comprising the light source information being used during the audio visualization is being taken from the actual light source (col. 7, lines 20-25 - the information regarding the lights with respect to which lights are operated, how long the light sources are operated, what color the light source output is, etc. is taken from the light source; col. 20, line 66 - col. 21, line 22 - audio visualization).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have received the light source information from the actual light source as disclosed by Kerr in the method disclosed by Chambers et al. in view of Suzuki et al. in view of Zhang in view of Zimmerman in order to further enhance the audio visualization to closer resemble the lighting effects seen during the actual live performance. However, Chambers et al. in view of Suzuki et al. in view of Zhang in view of Zimmerman in view of Kerr still fail to disclose that the signal received from the automated lighting system is used to modify the abstract visual presentation when the audio presentation is later audibly played back via the playback device.

Referring to the Tyra reference, Tyra discloses a method of providing synchronization of a video presentation with an audio presentation, comprising the signal received from the automated lighting system is used to modify the abstract visual presentation when the audio presentation is later audibly played back via the playback device (paragraphs [0004] and [0010] - the images can be combined to create an electronic rehearsal or virtual show meaning that the comprising the signal received from the automated lighting system is used to modify the abstract visual presentation when the audio presentation is later audibly played back via the playback device).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the signal received from the automated lighting system is used to modify the abstract visual presentation when the audio presentation is later audibly played back via the playback device as disclosed by Tyra in the method disclosed by Chambers et al. in view of Suzuki et al. in view of Zhang in view of Zimmerman in view of Kerr in order to create the concert effect on a display.

Regarding claim **25**, Chambers et al. in view of Suzuki et al. in view of Zhang in view of Zimmerman in view of Kerr in view of Tyra discloses all the limitations as previously discussed with respect to claims 21 and 24 including that the signal from the automated lighting system is a spotlight-on signal, a spotlight color signal, or a spotlight position signal (Suzuki et

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al: Fig. 9 – section 81 - this signal signifies when the spotlight was on; col. 2, lines 35-43; col. 14, lines 37-53). Furthermore, Kerr discloses a method of providing synchronization of a video presentation with an audio presentation, comprising the light source information being used during the audio visualization is being taken from the actual light source (col. 7, lines 20-25 - the information regarding the lights with respect to which lights are operated, how long the light sources are operated, what color the light source output is, etc. is taken from the light source; col. 20, line 66 - col. 21, line 22 - audio visualization).

Regarding claim **26**, Chambers et al. in view of Suzuki et al. in view of Zhang in view of Zimmerman discloses all the limitations as previously discussed with respect to claim 21 including that the method further comprising inserting at least one cue with respect to the audio based at least in part on monitoring of stage lighting effects (Suzuki et al: Fig. 9 – section 81 - this signal signifies when the spotlight was on; col. 2, lines 35-43; col. 14, lines 37-53). However, Chambers et al. in view of Suzuki et al. in view of Zhang in view of Zimmerman fails to disclose that the information regarding the light source is actually coming from the light source and not being entered in by the user and that the signal received from the automated lighting system is used to modify the abstract visual presentation when the audio presentation is later audibly played back via the playback device.

Referring to the Kerr reference, Kerr discloses a method of providing synchronization of a video presentation with an audio presentation, comprising the light source information being used during the audio visualization is being taken from the actual light source (col. 7, lines 20-25 - the information regarding the lights with respect to which lights are operated, how long the light sources are operated, what color the light source output is, etc. is taken from the light source; col. 20, line 66 - col. 21, line 22 - audio visualization).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have received the light source information from the actual light source as disclosed by Kerr in the method disclosed by Chambers et al. in view of Suzuki et al. in view of Zhang in view of Zimmerman in order to further enhance the audio visualization to closer resemble the lighting effects seen during the actual live performance. However, Chambers et al. in view of Suzuki et al. in view of Zhang in view of Zimmerman in view of Kerr still fail to disclose that the signal received from the automated lighting system is used to modify the abstract visual presentation when the audio presentation is later audibly played back via the playback device.

Referring to the Tyra reference, Tyra discloses a method of providing synchronization of a video presentation with an audio presentation, comprising the signal received from the automated lighting system is used to modify the abstract visual presentation when the audio

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presentation is later audibly played back via the playback device (paragraphs [0004] and [0010] - the images can be combined to create an electronic rehearsal or virtual show meaning that the comprising the signal received from the automated lighting system is used to modify the abstract visual presentation when the audio presentation is later audibly played back via the playback device).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the signal received from the automated lighting system is used to modify the abstract visual presentation when the audio presentation is later audibly played back via the playback device as disclosed by Tyra in the method disclosed by Chambers et al. in view of Suzuki et al. in view of Zhang in view of Zimmerman in view of Kerr in order to create the concert effect on a display.

Regarding claims **46**, this is a medium claim corresponding to the method claim 24 respectively. Therefore, claim 46 is analyzed and rejected as previously discussed with respect to claim 24.

Regarding claims **51**, this is an apparatus claim corresponding to the method claim 24 respectively. Therefore, claim 51 is analyzed and rejected as previously discussed with respect to claim 24.

7. Claims 29-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chambers et al. in view of Suzuki et al. in view of Zhang in view of

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Zimmerman as applied to claim 21 above, and further in view of Larson (U.S. Patent 5,440,756).

Regarding claims **29**, **30**, and **31**, Chambers et al. in view of Suzuki et al. in view of Zhang in view of Zimmerman discloses all the limitations as previously discussed with respect to claim 21, but fails to disclose analyzing a song by inserting at least one cue with respect to the audio based at least in part on a filter analysis on the power of a plurality of audio frequency bands, wherein the filter analysis cue includes a value to indicate an audio frequency band's strength over an interval of time, or wherein the filter analysis cue includes an indication that a signal of a selected frequency component of having a strength above a predetermined threshold value is present in the audio waveform.

Referring to the Larson reference, Larson discloses performing audio analysis using a filter to determine the frequency components of the audio (col. 72, lines 17-25 and 32-33).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included a filter to analyze the audio according to the frequency components as disclosed by Larson in the method disclosed by Chambers et al. in view of Suzuki et al. in view of Zhang in view of Zimmerman in order to further enhance the display to match the audio more precisely.

8. Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chambers in view of Suzuki et al. in view of Zhang in view of Zimmerman as

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applied to claim 21 above, and further in view of Hullinger et al. (U.S. Patent 6,295,092).

Regarding claim **36**, Chambers et al. in view of Suzuki et al. in view of Zhang in view of Zimmerman discloses all the limitations as previously discussed with respect to claim 21, but fails to disclose that the method further comprises providing for display text describing the cue with the cue, and providing for display abbreviated text describing a second cue in association with the second cue, wherein the abbreviation is performed at partly in response to a spacing of the second cue with respect to another cue. Official Notice is taken that the concept and advantages of adding text to a display to explain what is going on is well-known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided for display text describing the cue with the cue disclosed by Chambers et al. in view of Suzuki et al. in view of Zhang in view of Zimmerman in order to notify the user of what is going on during the audio presentation, which will further enhance the user's experience. However, Chambers et al. in view of Suzuki et al. in view of Zhang in view of Zimmerman still fail to disclose providing for display abbreviated text describing a second cue in association with the second cue, wherein the abbreviation is performed at partly in response to a spacing of the second cue with respect to another.

Referring to the Hullinger et al. reference, Hullinger et al. discloses a presentation device that preprocessing the text and if a line of text is

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determined to be longer than a predetermined length then the line of text is truncated (col. 5, lines 8-45 - this paragraph explains the process of the preparer that determines the text to be displayed, updates the time stamps to correlate it to the correct frame, and truncates the text if necessary, during this process the frame rate is taken into consideration).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided for display abbreviated (truncated) text describing a second cue in association with the second cue, wherein the abbreviation (truncation) is performed at partly in response to a spacing of the second cue with respect to another (frame rate) as disclosed by Hullinger et al. in the device disclosed by Chambers et al. in view of Suzuki et al. in view of Zhang in view of Zimmerman in order to efficiently display the text for the viewer.

9. Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chambers in view of Suzuki et al. in view of Zhang in view of Zimmerman as applied to claim 21 above, and further in view of Kryuchkov et al. (U.S. Patent Application Publication 2004/0102244).

Regarding claim **37**, Chambers et al. in view of Suzuki et al. in view of Zhang in view of Zimmerman discloses all the limitations as previously discussed with respect to claim 21, but fails to disclose that the designated cue is a rotation cue indicating a rotation speed of at least a first displayed object.

Referring to the Kryuchkov et al. reference, Kryuchkov et al. discloses a presentation device wherein rotation cue (rotation information) indicating a rotation speed of at least a first displayed object as inputted by the user (paragraph [0205]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have allowed the user to input information in order to determine the rotation of an object while being displayed in the method disclosed by Chambers et al. in view of Suzuki et al. in view of Zhang in view of Zimmerman in order to enhance the user's experience. Furthermore, the information that is being inputted into the Kryuchkov et al. reference regarding the rotation of an object can be translated into inserting a cue into the Suzuki et al. reference in order to control the presentation display.

10. Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chambers et al. in view of Suzuki et al. in view of Zhang in view of Zimmerman as applied to claim 21, and further in view of Nishitani et al. (U.S. Patent 7,161,079).

Regarding claim **42**, Chambers et al. in view of Suzuki et al. in view of Zhang in view of Zimmerman discloses all the limitations as previously discussed with respect to claim 1, but fails to disclose that the designated cue is included embedded with the audio presentation.

Referring to the Nishitani et al. reference, Nishitani et al. discloses a method wherein the designated cue is included embedded with the audio presentation (Fig. 6; col. 8, lines 29-37).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have embedded the cues with the audio presentation as disclosed by Nishitani et al. instead of in a separate file as disclosed by Suzuki et al. in the method disclosed by Chambers et al. in view of Suzuki et al. in view of Zhang in view of Zimmerman in order to easily correlate the audio sample with the cue rather than having to read two separate files and trying to correlate them. Also, embedding the cues into the audio presentation allows the cues to always be accessible because if they were stored in a separate location the other location may be unavailable for some reason.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HEATHER JONES whose telephone number is (571)272-7368. The examiner can normally be reached on Mon. - Thurs.: 7:00 am - 4:30 pm, and every other Fri.: 7:00 am - 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Vaughn can be reached on 571-272-3922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Heather R Jones
Examiner
Art Unit 2481

/Heather R Jones/
Examiner, Art Unit 2481

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/WILLIAM C. VAUGHN JR/
Supervisory Patent Examiner, Art Unit 2481